

## ABSTRACT OF THE DISCLOSURE

An ATM-based delay adaptive scheduling apparatus adaptive according to a traffic type and method thereof. A scheduling portion categorizes an input cell according to the traffic type, and generates service  
5 information of the cell suitably for the traffic type of the cells. A controlling portion determines a priority of cell service provision based on the service information, and an outputting portion reads a corresponding cell from the storing portion according to the service providing priority determined by the controlling portion, and outputs the read cell to an ATM switch. By  
10 generating the service information of each cell in the form of a tag, and by determining a priority of service provision according to the generated service information, an adequate QoS is guaranteed for each traffic type under a multi-traffic environment, and an efficient use of bandwidth provided in a current network is achieved by using the characteristics of each traffic type.